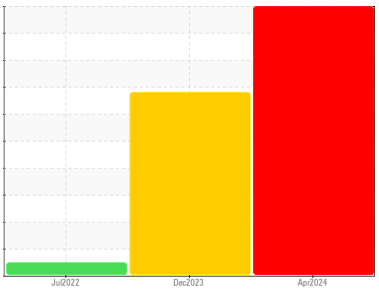
PROBLEM SUMMARY

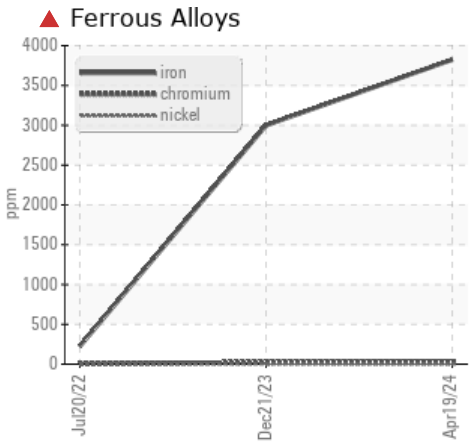
Sample Rating Trend

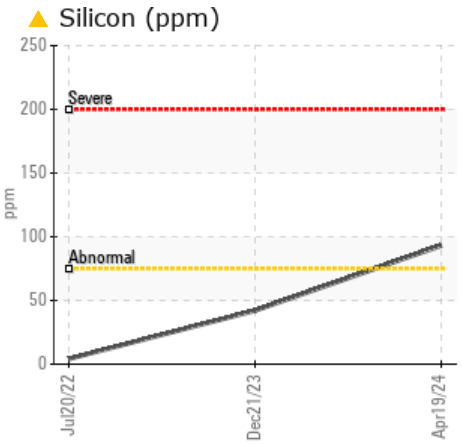


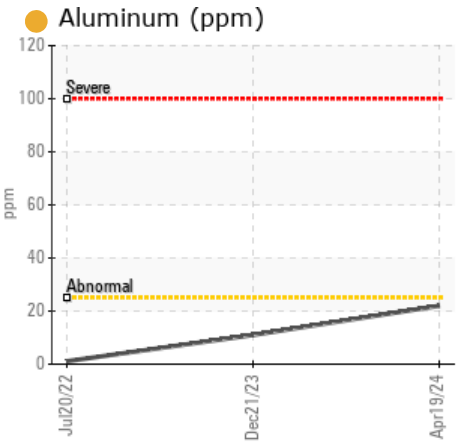
WEAR

Machine Id
040-R0006
Component
Left Final Drive
Fluid
SCHAEFFER SCHAEFFER 293 MOLY 75W90 (2 QTS)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>500	▲ **3824**	▲ 2999	225
Chromium	ppm	ASTM D5185m	>10	▲ **36**	▲ 24	2
Silicon	ppm	ASTM D5185m	>75	▲ **93**	42	4

Customer Id: AECCHATN
Sample No.: WC0903845
Lab Number: 06159497
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

WEAR

21 Dec 2023 Diag: Jonathan Hester

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.Gear wear is indicated. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

NORMAL

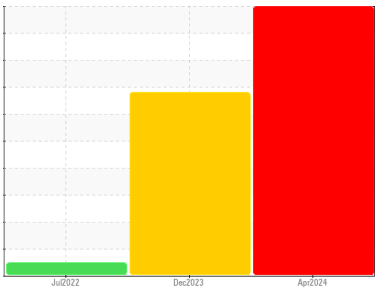
20 Jul 2022 Diag: Don Baldridge

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
040-R0006
Component
Left Final Drive
Fluid
SCHAEFFER SCHAEFFER 293 MOLY 75W90 (2 QTS)

DIAGNOSIS

▲ Recommendation
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear
Gear wear is indicated.

▲ Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0903845**	WC0868435	WC0698080
Sample Date		Client Info		**19 Apr 2024**	21 Dec 2023	20 Jul 2022
Machine Age	hrs	Client Info		**6945**	6459	2244
Oil Age	hrs	Client Info		**6631**	0	0
Oil Changed		Client Info		**Changed**	Not Changd	Not Changd
Sample Status				**SEVERE**	SEVERE	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	▲ **3824**	▲ 2999	225
Chromium	ppm	ASTM D5185m	>10	▲ **36**	▲ 24	2
Nickel	ppm	ASTM D5185m	>10	**1**	2	0
Titanium	ppm	ASTM D5185m		**2**	1	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	● **22**	11	1
Lead	ppm	ASTM D5185m	>25	**0**	<1	<1
Copper	ppm	ASTM D5185m	>50	**9**	12	3
Tin	ppm	ASTM D5185m	>10	**<1**	<1	0
Vanadium	ppm	ASTM D5185m		**<1**	<1	0
Cadmium	ppm	ASTM D5185m		**<1**	<1	0

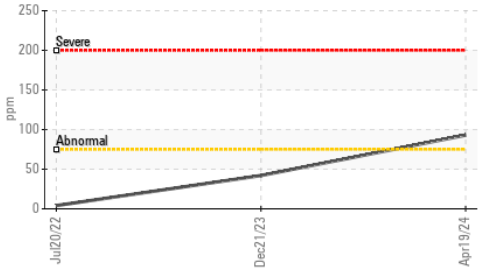
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**73**	44	234
Barium	ppm	ASTM D5185m		**10**	8	6
Molybdenum	ppm	ASTM D5185m		**0**	<1	3
Manganese	ppm	ASTM D5185m		**26**	19	2
Magnesium	ppm	ASTM D5185m		**16**	10	<1
Calcium	ppm	ASTM D5185m		**218**	114	6
Phosphorus	ppm	ASTM D5185m		**1284**	1182	1469
Zinc	ppm	ASTM D5185m		**93**	73	26
Sulfur	ppm	ASTM D5185m		**29166**	24822	27693

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	▲ **93**	42	4
Sodium	ppm	ASTM D5185m		**28**	21	4
Potassium	ppm	ASTM D5185m	>20	**36**	23	3

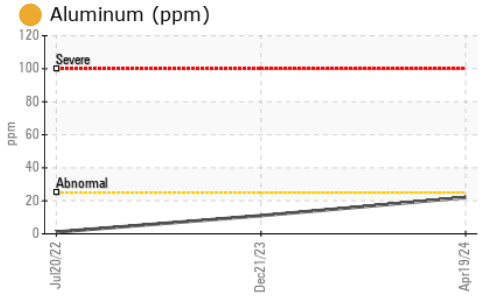
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

OIL ANALYSIS REPORT

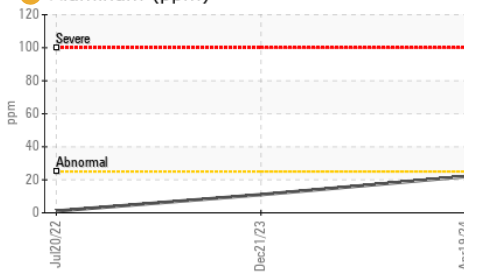
Silicon (ppm)



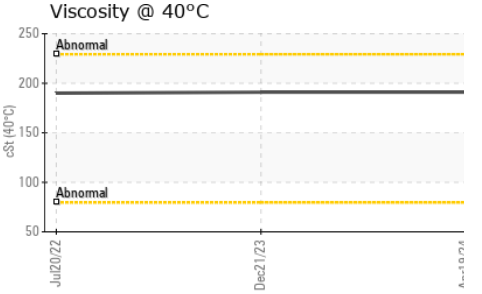
Aluminum (ppm)



Aluminum (ppm)



Viscosity @ 40°C

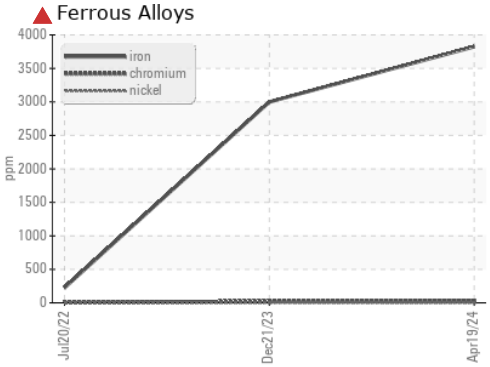


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**191**	191	190

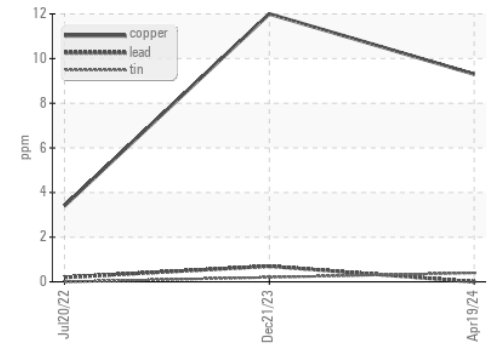
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*		*no image*
Bottom			*no image*		*no image*

GRAPHS

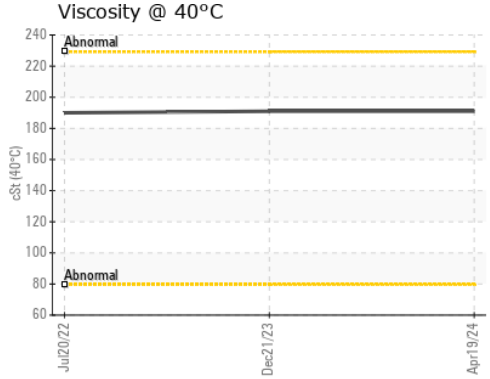
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0903845
Lab Number : 06159497
Unique Number : 10994920
Test Package : CONST

Received : 24 Apr 2024
Tested : 25 Apr 2024
Diagnosed : 26 Apr 2024 - Jonathan Hester

SHIMMICK CONSTRUCTION
5535 TRAILHEAD DRIVE
CHATTANOOGA, TN
US 37415
Contact: DANIEL LISELLA
daniel.lisella@shimmick.com
T:
F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: AECCHATN [WUSCAR] 06159497 (Generated: 04/26/2024 11:25:46) Rev: 1

Submitted By: TECH TECHNICIAN